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PATENT

UNITED STATES PATENT AND TRADEMARK OFFICE
(Case No. 02-326-A (400/046US))

IN THE APPLICATION OF:

James McSwiggen

Serial No. 10/724,270

Filed: November 26, 2003

Title Nucleic Acid Treatment of Diseases
or Conditions Related to Levels of
RAS, HER2, and HIV

Examiner: TBA

Group Art Unit: 1635

Confirmation No.: 4392

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

1. We are transmitting herewith the attached papers for the above-identified patent application:

- ☒ Information Disclosure Statement;
- ☒ PTO Form-1449;
- ☒ Copies of IDS Citations for S/N 10/724,270 (Total 5 documents); and
- ☒ Return Postcard

2. **GENERAL AUTHORIZATION TO CHARGE OR CREDIT FEES:** Please charge any additional fees or credit overpayment to Deposit Account No. 13-2490. A duplicate copy of this sheet is enclosed.

3. **CERTIFICATE OF MAILING UNDER 37 CFR § 1.8:** I hereby certify that I directed that this Transmittal Letter and the correspondence identified above be deposited with the United States Postal Service as "First Class Mail," addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date indicated below.

Respectfully submitted,

Dated: Dec. 16, 2004

By:

Andrew W. Williams
Reg. No. 48,644

McDonnell Boehnen Hulbert & Berghoff LLP
300 South Wacker Drive
Chicago, Illinois 60606
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Fax: 312-913-0002



IN THE APPLICATION OF:

James McSwiggen

Serial No. 10/724,270

Filed: November 26, 2003

Title **NUCLEIC ACID TREATMENT OF DISEASES OR CONDITIONS RELATED TO LEVELS OF RAS, HER2, AND HIV**

Examiner: TBA

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Confirmation No.: 4392

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Pursuant to the duty of disclosure provided by 37 C.F.R. § 1.56 and §§ 1.97-98, the applicants wish to make all references listed in the PTO-1449 form enclosed herewith of record in the above-identified application.

This application is a continuation-in-part of International Application No. PCT/US02/16840, filed May 29, 2002, which claims the benefit of U.S. Provisional Application No. 60/294,140, filed May 29, 2001, U.S. Provisional Application No. 60/296,249, filed June 6, 2001, and U.S. Provisional Application No. 60/318,471, filed September 10, 2001; this application is also a continuation-in-part of Application No. 10/157,580, filed May 29, 2002, and is also a continuation-in-part of Application No. 10/163,552, filed June 6, 2002, and is also a continuation-in-part of Application No. 10/238,700, filed September 10, 2002; this application is also a continuation-in-part of Application No. 10/693,059, filed October 23, 2003, which is a continuation-in-part of Application No. 10/444,853, filed May 23, 2003, which is a continuation-

CERTIFICATE OF MAILING (37 C.F.R. 1.8)

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Date: Dec. 16, 2004

Andrew W. Williams

in part of U.S. Patent Application No. 10/417,012, filed April 16, 2003; and Application No. 10/693,059 is also a continuation-in-part of Application No. 10/427,160, filed April 30, 2003, and International Application No. PCT/US02/15876, filed May 20, 2002, which claims the benefit of U.S. Provisional Application No. 60/292,217, filed May 18, 2001, U.S. Provisional Application No. 60/306,883, filed July 20, 2001, U.S. Provisional Application No. 60/311,865, filed August 13, 2001, and U.S. Provisional Application No. 60/362,016, filed March 6, 2002; this application is also a continuation-in-part of U.S. Application No. 10/652,791, filed August 29, 2003, and also a continuation-in-part of U.S. Application No. 10/422,704, filed April 24, 2003; this application is also a continuation-in-part of International Patent Application No. PCT/US03/05346, filed February 20, 2003, and a continuation-in-part of International Patent Application No. PCT/US03/05028, filed February 20, 2003, both of which claim the benefit of U.S. Provisional Application No. 60/358,580, filed February 20, 2002, U.S. Provisional Application No. 60/363,124, filed March 11, 2002, U.S. Provisional Application No. 60/386,782, filed June 6, 2002, U.S. Provisional Application No. 60/406,784, filed August 29, 2002, U.S. Provisional Application No. 60/408,378, filed September 5, 2002, U.S. Provisional Application No. 60/409,293, filed September 9, 2002, and U.S. Provisional Application No. 60/440,129, filed January 15, 2003. The instant application claims the benefit of all the listed applications. In accordance with Rule 37 C.F.R. § 1.98(d) some of the references on the PTO-1449 form have been previously cited and submitted to the Patent Office with prior applications which are relied on for an earlier effective filing date under 35 U.S.C. § 120, and therefore a copy of these references are not enclosed herein.

The references were submitted in co-owned U.S. Serial No. 10/157,580, in co-owned U.S. Serial No. 10/163,552, in co-owned U.S. Serial No. 10/238,700, in co-owned U.S. Serial No. 10/444,853, in co-owned U.S. Serial No. 10/427,160, and in co-owned U.S. Serial No. 10/652,791. Applicants have not supplied copies of these references, pursuant to the provisions of 37 C.F.R. Sec. 1.98(d), believing the references to be available to the Examiner in the prosecution history file of said earlier applications, only copies of references not previously cited and submitted to the Patent and Trademark Office are enclosed for the convenience of the Examiner (document numbers marked with "*" are not enclosed). Applicants would be happy to provide a copy for the Examiner's convenience upon request. Applicants respectfully ask the Examiner to telephone their undersigned representative to obtain a copy if the unexpected

unavailability of any of these references would preclude the Examiner from considering the reference and not initialing it on the accompanying PTO Form 1449.

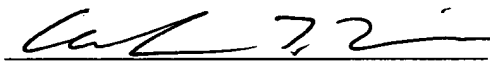
Also, enclosed are copies of International Search Reports in which some of the references listed on the enclosed 1449 were cited during the prosecution of related PCT applications.

Portions of the references may be material to the examination of the pending claims, however no such admission is intended. 37 C.F.R. 1.97 (h). The references have not been reviewed in sufficient detail to make any other representation and, in particular, no representation is intended as to the relative importance of any portion of the references. This Statement is not a representation that the cited references have effective dates early enough to be "prior art" within the meaning of 35 U.S.C. sections 102 or 103.

Respectfully submitted,

McDonnell Boehnen Hulbert & Berghoff LLP

Dated: Dec. 16 2004

By: 
Andrew W. Williams
Reg. No. 48,644

FORM PTO-1449
(Rev. 2-32)

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.

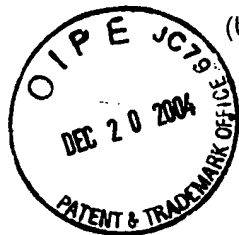
02-326-A
(400.046)

Serial No.

10/724,270

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(Use several sheets if necessary)



Applicant:

James McSwiggen

Filing Date:

November 26, 2003

Group:

1635

U.S. PATENT APPLICATION DOCUMENTS

Examiner Initial		Application Number	Filing Date	Name			Publication Date
	*	08/878,640	06/19/1997	Ludwig et al.			
	*	60/082,404	04/20/1998	Thompson et al.			
	*	60/101,174	09/14/1998	Hartmann et al.			
	*	US 2001/0007666	01/05/1999	Hoffman et al.			07/12/01
	*	09/301,511	04/28/1999	Beigelman et al.			
	*	09/476,387	12/30/1999	Beigelman et al.			
	*	09/740,332	12/18/2000	Blatt et al.			
	*	US 2002/0130430	12/29/2000	Castor			09/19/02
	*	09/800,594	03/06/2001	Usman and McSwiggen			
	*	60/292,217	05/18/2001	Adamic et al.			
	*	60/306,883	07/20/2001	Vargeese et al.			
	*	09/918,728	07/31/2001	Beigelman et al.			
	*	US 2002/0137210	08/09/2001	Churikov			09/26/02
	*	10/201,394	08/13/2001	Vargeese et al.			
	*	60/311,865	08/13/2001	Vargeese et al.			
	*	60/358,580	02/20/2002	Beigelman et al.			
	*	60/362,016	03/06/2002	Matulic-Adamic et al.			

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication.

Examiner Initial		Application Number	Filing Date	Name			Publication Date
	*	60/363,124	03/11/2002	Beigelman et al.			
	*	10/151,116	05/17/2002	Matulic-Adamic et al.			
	*	60/386,782	06/06/2002	Beigelman et al.			
	*	60/402,996	08/13/2002	Usman et al.			
	*	60/406,784	08/29/2002	Beigelman et al.			
	*	60/408,378	09/05/2002	Beigelman et al.			
	*	60/409,293	09/09/2002	Beigelman et al.			
	*	60/440,129	01/15/2003	Beigelman et al.			
	*	10/417,012	04/16/2003	McSwiggen et al.			
	*	10/422,704	04/24/2003	McSwiggen et al.			
	*	10/427,160	04/30/2003	Vargeese et al.			
	*	10/444,853	05/23/2003	McSwiggen et al.			
	*	10/652,791	08/29/2003	McSwiggen et al.			
	*	10/693,059	10/23/2003	McSwiggen et al.			
	*	10/720,448	11/24/2003	McSwiggen et al.			
	*	10/727,780	12/03/2003	Vaish et al.			
	*	60/543,480	02/10/2004	Jadhavi et al.			

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	*	4,987,071	01/22/1991	Cech et al.			
	*	5,108,921	04/28/1992	Low et al.			
	*	5,138,045	08/11/1992	Cook et al.			
	*	5,214,136	05/25/1993	Lin et al.			
	*	5,270,163	12/14/1993	Gold et al.			
	*	5,334,711	08/02/1994	Sproat et al.			
	*	5,416,016	05/16/1995	Low et al.			

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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	*	5,475,096	12/12/1995	Gold et al.			
	*	5,525,468	06/11/1996	McSwiggen			
	*	5,589,332	12/31/1996	Shih et al.			
	*	5,599,704	02/04/1997	Thompson et al.			
	*	5,624,803	04/29/1997	Noonberg et al.			
	*	5,627,053	05/06/1997	Usman et al.			
	*	5,631,359	05/20/1997	Chowrira et al.			
	*	5,631,360	05/20/1997	Usman et al.			
	*	5,633,133	05/27/1997	Long et al.			
	*	5,670,633	09/23/1997	Cook et al.			
	*	5,672,695	09/30/1997	Eckstein et al.			
	*	5,693,535	12/02/1997	Draper et al.			
	*	5,716,824	02/10/1998	Beigelman et al.			
	*	5,741,679	04/21/1998	George et al.			
	*	5,792,847	08/11/1998	Buhr et al.			
	*	5,804,683	09/08/1998	Usman et al.			
	*	5,807,718	09/15/1998	Joyce et al.			
	*	5,814,620	09/29/1998	Robinson et al.			
	*	5,831,071	11/03/1998	Usman et al.			
	*	5,834,186	11/10/1998	George et al.			
	*	5,849,902	12/15/1998	Arrow et al.			
	*	5,854,038	12/29/1998	Sullenger et al.			
	*	5,871,914	02/16/1999	Nathan			
	*	5,889,136	03/30/1999	Scaringe et al.			
	*	5,898,031	04/27/1999	Crooke			
	*	5,902,880	05/11/1999	Thompson et al.			
	*	5,910,583	06/08/1999	Marks et al.			

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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	*	5,968,748	10/19/1999	Bennett et al.			
	*	5,972,704	10/26/1999	Draper et al.			
	*	5,989,912	11/23/1999	Arrow et al.			
	*	5,998,203	12/07/1999	Adamic et al.			
	*	6,001,311	12/14/1999	Brennan			
	*	6,005,087	12/21/1999	Cook et al.			
	*	6,008,400	12/28/1999	Scaringe et al.			
	*	6,054,299	04/25/2000	Conrad			
	*	6,054,576	04/25/2000	Bellon et al.			
	*	6,057,156	05/02/2000	Akhtar et al.			
	*	6,107,062	08/22/2000	Hu et al.			
	*	6,107,094	08/22/2000	Crooke			
	*	6,111,086	08/29/2000	Scaringe et al.			
	*	6,117,657	09/12/2000	Usman et al.			
	*	6,127,173	10/03/2000	Eckstein et al.			
	*	6,146,886	11/14/2000	Thompson et al.			
	*	6,153,737	11/28/2000	Manoharan et al.			
	*	6,159,692	12/12/2000	Draper et al.			
	*	6,159,714	12/12/2000	Usman et al.			
	*	6,162,909	12/19/2000	Bellon et al.			
	*	6,168,778	01/02/2001	Janjic et al.			
	*	6,180,613	01/30/2001	Kaplitt et al.			
	*	6,235,310	05/22/2001	Wang et al.			
	*	6,235,886	05/22/2001	Manoharan et al.			
	*	6,248,878	06/19/2001	Adamic et al.			
	*	6,300,074	10/09/2001	Gold			
	*	6,303,773	10/16/2001	Bellon et al.			

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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date if Appropriate
	*	6,335,434	01/01/2002	Guzaev et al.			
	*	6,353,098	03/05/2002	Usman et al.			
	*	6,362,323	03/26/2002	Usman et al.			
	*	6,372,427	04/16/2002	Kandimalla et al.			
	*	6,395,492	05/28/2002	Manoharan et al.			
	*	6,395,713	05/28/2002	Beigelman et al.			
	*	6,437,117	08/20/2002	Usman et al.			
	*	6,447,796	09/10/2002	Vook et al.			
	*	6,469,158	10/22/2002	Usman et al.			
	*	6,476,205	11/05/2002	Buhr et al.			
	*	6,528,631	03/04/2003	Cook et al.			
	*	6,506,559	06/14/2003	Fire et al.			
	*	6,586,524	07/01/2003	Sagara			
	*	6,617,156	09/09/2003	Doucette-Stam et al.			

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	*	88/09810	12/15/1988	WO (Tullis et al.)				
	*	89/02439	03/23/1989	WO (Arnold et al.)				
	*	0 360 257	03/28/1990	EP (Hampel et al.)				
	*	90/12096	10/18/1990	WO (Low et al.)				
	*	90/14090	11/29/1990	WO (Gillespie et al.)				
	*	91/03162	03/21/1991	WO (Rossi et al.)				
	*	91/18913	12/12/1991	WO (Scanlon et al.)				
	*	91/18625	12/12/1991	WO (Scanlon et al.)				
	*	91/18624	12/12/1991	WO (Scanlon et al.)				

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	*	92/00080	01/09/1992	WO (Reddy et al.)				
	*	92/07065	04/30/1992	WO (Eckstein et al.)				
	*	93/15187	08/05/1993	WO (Usman et al.)				
	*	93/23569	11/25/1993	WO (Draper et al.)				
	*	93/23057	11/25/1993	WO (Thompson and Draper)				
	*	94/01550	01/20/1994	WO (Agrawal et al.)				
	*	94/02595	02/03/1994	WO (Sullivan et al.)				
	*	95/04818	02/16/1995	WO (Draper et al.)				
	*	95/06731	03/09/1995	WO (Usman et al.)				
	*	95/11304	04/27/1995	WO (Usman et al.)				
	*	95/11910	05/04/1995	WO (Dudycz et al.)				
	*	95/13380	05/18/1995	WO (Draper et al.)				
	*	95/23225	08/31/1995	WO (Stinchcomb et al.)				
	*	96/10392	04/11/1996	WO (Holland et al.)				
	*	96/10391	04/11/1996	WO (Choi et al.)				
	*	96/10390	04/11/1996	WO (Ansell et al.)				
	*	96/18736	06/20/1996	WO (Beigelman et al.)				
	*	96/22689	08/01/1996	WO (Pyle et al.)				
	*	97/26270	07/24/1997	WO (Beigelman et al.)				
	*	808 898	11/26/1997	EP (Uhlmann et al.)				
	*	98/13526	04/02/1998	WO (Woolf et al.)				
	*	98/27104	06/25/1998	WO (Breaker et al.)				
	*	98/28317	07/02/1998	WO (Matulic-Adamic et al.)				
	*	98/43993	10/08/1998	WO ((Breaker et al.)				
	*	98/58058	12/23/1998	WO (Ludwig & Sproat)				
	*	99/05094	02/04/1999	WO (Beigelman et al.)				

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	*	99/04819	02/04/1999	WO (Klimuk)				
	*	99/07409	02/18/1999	WO (Deschamps de Paillette et al.)				
	*	99/14226	03/25/1999	WO (Wengel et al.)				
	*	99/17120	04/08/1999	WO (Davis and Bishop)				
	*	99/16871	04/08/1999	WO (Eckstein et al.)				
	*	99/29842	06/17/1999	WO (Sullenger et al.)				
	*	99/31262	06/24/1999	WO (Barry et al.)				
	*	99/31118	06/24/1999	WO (Czubayko and Wellstein)				
	*	99/32619	07/01/1999	WO (Fire et al.)				
	*	99/45146	09/10/1999	WO (Todd et al.)				
	*	99/49029	09/30/1999	WO (Graham et al.)				
	*	99/50452	10/07/1999	WO (Todd et al.)				
	*	99/53050	10/21/1999	WO (Waterhouse et al.)				
	*	99/54459	10/28/1999	WO (Thompson et al.)				
	*	99/55857	11/04/1999	WO (Beigelman et al.)				
	*	99/61631	12/02/1999	WO (Heifetz et al.)				
	*	99/66063	12/23/1999	WO (Manoharan et al.)				
	*	00/01846	01/13/2000	WO (Plaetinck et al.)				
	*	00/17369	03/30/2000	WO (Gurney et al.)				
	*	00/22113	04/20/2000	WO (Skillern)				
	*	00/22114	04/20/2000	WO (Conrad et al.)				
	*	00/24931	05/04/2000	WO (Nathan and Ellington)				
	*	00/26226	05/11/2000	WO (Breaker et al.)				
	*	00/44895	08/03/2000	WO (Kreutzer et al.)				
	*	00/44914	08/03/2000	WO (Li et al.)				
	*	2,359,180	08/03/2000	CA (Kreutzer et al.)				

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	*	00/49035	08/24/2000	WO (Sheen)				
	*	00/53722	09/14/2000	WO (O'Hare & Normand)				
	*	00/63364	10/26/2000	WO (Pachuk et al.)				
	*	00/66604	11/09/2000	WO (Wengel et al.)				
	*	199 25 052	12/07/2000	DE (Cherkasky et al.)				
	*	01/04313	01/18/2001	WO (Satishchandran et al.)				
	*	01/16312	03/08/2001	WO (McSwiggen et al.)				
	*	2001240375	03/16/2001	AU (Graham et al.)				
	*	01/29058	04/26/2001	WO (Mello et al.)				
	*	01/36646	05/25/2001	WO (Zernicka-Goetz et al.)				
	*	01/92513	05/29/2001	WO (Ardnt et al.)				
	*	01/38551	05/31/2001	WO (Grossniklaus)				
	*	01/42443	06/14/2001	WO (Churikov et al.)				X
	*	01/49877	07/12/2001	WO (Todd)				
	*	01/49844	07/12/2001	WO (Driscoll et al.)				
	*	01/53475	07/26/2001	WO (Cogoni et al.)				
	*	01/68836	09/20/2001	WO (Beach et al.)				
	*	01/70949	09/27/2001	WO (Graham et al.)				
	*	01/70944	09/27/2001	WO (Honer et al.)				
	*	01/72774	10/04/2001	WO (Deak et al.)				
	*	01/75164	10/11/2001	WO (Tuschl et al.)				
	*	01/96584	12/20/2001	WO (Mushegian et al.)				
	*	1 144 623 B1	01/29/2002	EP (Kreutzer et al.)				
	*	02/15876	02/28/2002	WO (Beigelman et al.)				
	*	02/22636	03/21/2002	WO (Bennett et al.)				
	*	02/38805	05/16/2002	WO (Echeverri et al.)				

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		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	*	02/44321	06/06/2002	WO (Tuschl et al.)				
	*	02/55693	07/18/2002	WO (Kreutzer et al.)				
	*	02/55692	07/18/2002	WO (Kreutzer et al.)				
	*	02/094185	11/28/2002	WO (Beigelman et al.)				
	*	03/05028	02/20/2003	WO (McSwiggen et al.)				
	*	03/05346	02/20/2003	WO (McSwiggen et al.)				
	*	03/024420	03/27/2003	WO (Ahlheim et al.)				
	*	03/046185	06/05/2003	WO (Wang et al.)				
	*	03/047518	06/12/2003	WO (Wang et al.)				
	*	03/064626	08/07/2003	WO (Woolf et al.)				
	*	03/064625	08/07/2003	WO (Woolf et al.)				
	*	03/070918	08/28/2003	WO (McSwiggen et al.)				
	*	03/074654	09/12/2003	WO (McSwiggen et al.)				
	*	04/013280	02/12/2004	WO (Davidson et al.)				

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1.		Genbank Accession No. AJ302647
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2.		GenBank Accession No. M66437
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